Cyber CIEGE

Can you keep the network alive?

**CyberCIEGE Information Assurance
Training Tool 1.1
Limited Distribution**

CyberCIEGE@nps.edu
cisr.nps.navy.mil/cyberciege.html

*You build and configure computer
networks to satisfy demanding users.*

*Vandals and professionals attack your
defenses to compromise your assets.*

CyberCIEGE illustrates computer and network
security principles through simulation and
resource management trade-offs. CyberCIEGE
players construct computer networks and make
choices affecting the ability of these networks
and the scenario's virtual users to protect valuable
assets from attacks by both vandals and
well-motivated professionals.

"CyberCIEGE" Information Assurance Teaching Tool Released by Naval Postgraduate School

U.S. Government Distribution of Computer Security Resource Management Simulation

Monterey, California, February 7, 2005 – The Naval Postgraduate School (NPS) announced the limited release of CyberCIEGE, an innovative computer-based tool to teach network security concepts. The tool enhances information assurance education and training through the use of computer gaming techniques such as those employed in SimCity™ and RollerCoaster Tycoon®. In the CyberCIEGE virtual world, users spend virtual money to operate and defend their networks, and can watch the consequences of their choices, while under attack.

In its interactive environment, CyberCIEGE covers the significant aspects of network management and defense. Users purchase and configure workstations, servers, operating systems, applications, and network devices. They make tradeoffs and prioritization decisions as they struggle to maintain the ideal balance between budget, productivity, and security. In its longer scenarios, users advance through a series of stages and must protect increasingly valuable corporate assets against escalating attacks.

The CyberCIEGE encyclopedia of security concepts contains a wealth of information assurance knowledge. Users can read the encyclopedia, or watch its instructional movies!

CyberCIEGE supports many educational venues, from basic workforce awareness training to university classes. It can help organizations meet DoD Directive 8570 obligations for IA training, annual IA awareness refreshers, and appropriate IA education. CyberCIEGE contains support for the creation of tools to record and assess student progress. Best of all, CyberCIEGE is extensible.

CyberCIEGE includes a language for describing its security scenarios. Using this language, educators may construct or modify scenarios that can then be played by students. CyberCIEGE was created by the Center for Information Systems Security Studies and Research (CISR) at NPS, and Rivermind, Inc., of San Mateo, CA. NPS and Rivermind are seeking sponsors interested in tailoring the tool to meet their specific requirements. This might include the development of new scenarios, user assessment tools, extensions to the simulation, or new artwork.

Development of CyberCIEGE was sponsored by the US Navy, the Naval Education and Training Command, the Office of Naval Research, and the Office of the Secretary of Defense. Numerous NPS students have participated in tool and scenario development.

A limited distribution version of CyberCIEGE is now available at no cost to agencies of the US Government. An evaluation version of the commercial product is currently available from Rivermind. CyberCIEGE will be released by Rivermind in April 2005.